TEACHING THE THREE R'S TO THE MENTALLY EXCEPTIONAL CHILD

VERA ELOISE SMITH

Digitized by the Internet Archive
in 2011 with funding from
LYRASIS Members and Sloan Foundation

http://www.archive.org/details/teachingthreerst00smit

Manuscript Theses

Unpublished theses submitted for the Master's Degree are deposited in the Florida Southern College Library and are available for inspection. Use of any thesis is limited by the rights of the author. Bibliographical references may be noted, but passages may not be copied unless the author has given permission. Credit must be given in subsequent written or published work.

A library which borrows this thesis for use by its clientele is expected to make sure that the borrower is aware of the above restrictions.

FLORIDA SOUTHERN COLLEGE LIBRARY

TEACHING THE THREE R'S
TO THE
MENTALLY EXCEPTIONAL CHILD

VERA ELOISE SMITH

Submitted in partial fulfillment of the
requirements for the degree of Master
of Arts in the Graduate School of
Florida Southern College

1949

APPROVAL

S. T. Lastinger

Professor Samuel T. Lastinger, Advisor

_____

Reader

_____

Reader

_____

Date submitted to the Chairman
of the Graduate Committee

ACKNOWLEDGEMENTS

The author wishes to express her appreciation to Professor Samuel T. Lastinger, Advisor, for his helpful suggestions and criticisms and for his careful reading of this thesis during its preparation.

Acknowledgements are also due to Dr. James C. Peel, Dean, and Professor Donald A. Thompson, Director of Graduate Studies, Florida Southern College, for their helpful suggestions.

Most deeply the author is indebted to Dr. Thomas J. Wagner, instructor in classes for the exceptional child, Florida Southern College, who has given many helpful suggestions and much help.

The author also wishes to acknowledge the editing services of Mrs. Anna May Schenck and the splendid cooperation and assistance of Mrs. Grace H. Townsend.

TABLE OF CONTENTS

Chapter		Page
I	SETTING THE PROBLEM.	1
	The Problem	1
	General Statement.	1
	Specific Problem	1
	Delimitations.	1
	Basic Hypotheses.	1
	Significance of the Problem	2
II	CONCEPT OF TERMS	4
	The Curriculum.	4
	Motivation.	5
	The Slow-Learner.	5
	The Mentally Retarded	6
	The Gifted.	6
III	HISTORICAL STATUS OF THE EXCEPTIONAL CHILD	8
	The Slow-Learner.	8
	The Mentally Retarded	8
	The Gifted.	9
IV	PRESENT PRACTICES IN EDUCATION	11
	Methods in Use.	11
V	PROBLEMS OF ORGANIZATION OF SPECIAL CLASSES	14
	Methods of Choosing Pupils for Special Classes and Special Work .	14
	Special Equipment Needed in Schools or Classes.	15

Chapter		Page
	The Teacher	16
VI	IMPROVED PROGRAM IN READING.	20
	Importance of Reading	20
	Factors Which Influence Reading Readiness.	21
	Appraisal of Reading Readiness. . . .	23
	Pre-Reading Instruction	24
	General Methods of Teaching Reading	26
	Method For the Slow-Learner	28
	Procedure I.	29
	Procedure II	30
	Procedure III.	31
	Lucky Wheel.	38
	Rhyme Making	38
	Methods for the Mentally Retarded . .	39
VII	SPELLING	41
	Importance of Spelling.	41
	The Relation of Spelling to Reading.	42
	Method of Teaching.	43
VIII	WRITING.	48
	Importance of Writing	48
	When to Begin	50
	Types of Writing.	52
	Methods of Teaching	53
	The Left-Handed Child	57

Chapter		Page
IX	ARITHMETIC	60
	Importance of Arithmetic.	60
	Fundamental Skills.	62
	Methods of Instruction for the Slow-Learner	63
	Methods of Instruction for the Mentally Retarded.	68
X	THE GIFTED	70
	The Challenge of the Gifted	70
	Methods of Providing for the Gifted	71
	Education of the Gifted	72
	Specially Gifted Children	74
XI	CRITERIA FOR EVALUATION.	75
	Aims and Objectives of the Program.	75
	Ways of Evaluating the Program	77
XII	SUMMARY AND CONCLUSION	79
	BIBLIOGRAPHY	83
	A. Books.	83
	B. Periodicals	85

LIST OF FIGURES

Figure	Title	Page
1	I. Q. Classifications and the Per-Cent in Population.	7
2	Procedure I - "Bingo" Reading Game . . .	29
3	Procedure II - "Bingo" Reading Game. . .	30
4	Procedure III - "Bingo" Reading Game . .	31
5	Seat Work in Reading.	35
6	Phonetic Drill.	38
7	Writing Readiness Test.	50
8	Ring Toss Game.	65
9	Arithmetic Drill Cards	67

CHAPTER I

SETTING THE PROBLEM

The Problem

General Statement

The purpose of this study is to outline a curriculum that will best meet the needs of the mentally exceptional child.

Specific Problem

Specifically entailed in the study are the following:

1. Discovering to what extent the present techniques and procedures used are adaptable to teaching the slow-learner, the mentally retarded, and the gifted.

2. Determining new techniques and procedures to be used in teaching these groups when there are none that can be adapted.

Delimitations

The entire curriculum is too broad a scope for this study; therefore, specific procedures will be limited to: (1) Reading, (2) Spelling, (3) Writing, and (4) Arithmetic.

The study is also limited to the slow-learner, to the mentally retarded, and to the gifted groups of exceptional children.

Basic Hypotheses

Studies have revealed that facilities and plans for meeting the needs of the mentally slow child are very inadequate.

Studies have further shown that "the gifted child is the forgotten child of the school. . . neglected because he seems to demand no special attention."[1]

In meeting the needs of these exceptional children it is hoped that good citizens will be made of individuals who would, no doubt, be social misfits or state charges without proper educational advantages.

Significance of the Problem

As a result of research and investigations, Maxwell and Kilzer[2] have found that approximately seventeen per cent of the population are slow-learners, one per cent retarded mentally, and seven per cent are gifted. Approximately one-fourth of the entire population is included in these groups of mentally exceptional children for whom provision is to be made.

Case studies have shown that much of our social maladjustment or so called delinquency problems are results of the failure of the schools to meet the needs of the mentally slow child. If the child is expected to compete with the children of average intelligence, he will repeatedly experience failure and will turn to other ways of gaining the recognition of his group. If he continually experiences defeat in school situations, then possibly he will try to be

---

1. Elsie H. Martens, Teachers' Problems with Exceptional Children, Chapter II.

2. C. R. Maxwell and L. R. Kilzer, High School Administration, p. 89.

the leader of the neighborhood gang of boys who are always in some kind of mischief.

The gifted child has been neglected educationally for years and society suffers a great loss because of this neglect. This group of superior individuals should provide the future leaders of the business world and of the political world, but if their education is neglected they will not be capable of leadership. Gifted children need some form of enriched program which will keep them busy and which will also develop their innate abilities. It is the business of education to find by careful study and analysis of the problem the limitations in this field and to make definite plans for fitting the needs of these children in society.

Society will gain both financially and culturally by meeting these educational needs. The number to be placed in state institutions for the indigent and for the criminal will be less and the number of skillfully trained leaders for society will be greater.

CHAPTER II

CONCEPT OF TERMS

The Curriculum

The curriculum includes all the activities of the child under the supervision of the school, which in any way affect the learning process of the child.

The Nation's Schools in a reprint from Teaching Progress gives this definition of the curriculum:

> The curriculum includes more than subject matter. The total school experience concept includes the teacher and his personality, his attitude toward his pupils, his enthusiasm and vitality, as well as his preparation and special knowledges and skills. It includes pupil-teacher relationships; the children's relationships with each other, both individual and group, and their contributions to class activities and discussions; the relationships between the teachers and parents. It includes the guidance program and various forms of special services, such as mental and physical health services and welfare counseling. It includes books, maps, audio-visual aids and creative materials of various kinds: report cards, tests and examinations. It includes the teacher's choice of materials and methods, both planned and accidental, and the activities of the playground, corridor, lunchroom, and library. It includes the course of study which is the teacher's "guide" in directing the learning experiences of the children.
>
> The curriculum also includes the teacher's sensitivity to factors in the environment which may be brought into the classroom--field trips and other forms of school-community contests. It includes school organization, the rules and the regulations governing pupils and teachers, the school building with its janitorial staff, its facilities and equipment and their use, insofar as these in any way either contribute to or hinder the child's growth and development. It includes the curricular and extra-curricular activities and the many unorganized school and community activities for which the school is in some measure responsible. As the activities

of the school increase in scope, the curriculum becomes more inclusive.[1]

Motivation

Motivation is the act of stimulating in the pupil an interest in the subject and a desire to learn more about it by any number of procedures, such as reading, or making collections.

The Slow-Learner

The slow-learning child is somewhat below average in mental ability and school achievement but is not as low as the mentally retarded. There is much controversy about what I. Q. groups should be put in the different classifications. Frequently, children are referred to as bright, average, or sub-normal as though there were a clear-cut line of distinction, but this is erroneous thinking. There is no exact dividing line, but the slow-learner is usually put in the I.Q. range of from seventy to ninety.

According to Baker[2] the slow-learning child progresses at about five-sixths normal rate; that is, every six months of chronological age he progresses five months in mental age. There are also other differences in the slow-learner. He may be retarded in motor skill and muscular coordination, his strength and physical stamina are usually a little below par,

---

1. E. N. Lane, "Personality for the School Bulletin," The Nation's Schools. (January, 1948).

2. Harry J. Baker, Introduction to Exceptional Children, p. 246.

and illnesses are somewhat more common in this group. Unfortunately, he often lacks some of the desirable personal and social qualities found in normal groups.

The Mentally Retarded

The mentally retarded child has an I. Q. of from fifty to seventy. Heck[3] says the mentally retarded are "too slow in their academic ability to enable them to profit from the regular school program; neither content or method would be suitable. When forced to compete with children of average or high I. Q., these pupils fail; they develop a failure complex toward life; ambition is either destroyed or never developed. They are thus virtually taught they cannot succeed."

The Gifted

The gifted child is usually considered the one who has an I. Q. of 120 or above; however, some with I. Q.'s slightly below this will fit into the group quite well and occasionally some above will be misfits in this group.

The gifted child is usually of normal size and physical development which would make him a misfit if he were put with older children.

Maxwell and Kilzer[4] give the following table of I. Q. classifications and their per cents in population. The two

---

3. Arch O. Heck, The Education of the Exceptional Child, p. 343.

4. Maxwell and Kilzer, op. cit., p. 89.

top groups are the gifted children and the three lower groups are the slow-learning and mentally retarded groups.

Figure 1.

I. Q. CLASSIFICATIONS AND THE PER CENT IN POPULATION

Range of I. Q.	Per cent of Population	Classification
140 and up	0.25	Near genius or genius
120 to 139	6.75	Very superior
110 to 119	13.00	Superior
90 to 109	60.00	Normal
80 to 89	13.00	Dull but seldom feeble minded
70 to 79	6.00	Borderline. Sometimes feeble minded
Below 70	1.00	Feeble minded, Morons, Imbeciles and Idiots, in this order.

CHAPTER III

HISTORICAL STATUS OF THE EXCEPTIONAL CHILD

The Slow-Learner

There is very little to be said about the history of the slow-learner, for until the last twenty years or less, he was educated along with the normal group and was either considered lazy or dumb and not much effort was wasted upon him.

The Mentally Retarded

The history of the mentally retarded and those lower, reaching down to the idiot class, is certainly not a pretty picture. In older times the low-grade feeble-minded were left out to die; in royal courts many of the jesters and court fools were from this group of individuals.

The first step toward educating them was made by Itard,[1] (1812-1880). He found what was apparently a wild boy wandering in the woods near Paris and took him in, trying very hard to educate him. Some improvement was made, but Itard finally gave up, concluding that the boy was an idiot.

Fortunately for the retarded youth, Itard's work aroused interest and Edward Sequin established a school for the mentally retarded in Paris in 1837. In 1848 he came to the United States and helped with institutions in several of the

---

1. Harry J. Baker, Introduction to Exceptional Children, p. 268.

eastern states. However, he was not the pioneer in this field in the United States. Dr. Samuel G. Howe started a class for training idiots in 1837, and Horace Mann who visited Europe in 1842 advocated the establishment of schools for the feeble-minded.

The first special class was started in 1859 in Halle, Germany, and many other European cities established classes in the next few years. The first class in the United States was started in Springfield, Massachusetts, in 1897; another was founded in Chicago in 1898, and one in Detroit in 1903. There had been a private class opened earlier by H. B. Wilbur at Barre, Massachusetts, in 1848.[2]

The public schools and provisions for them have grown slowly but steadily and encouragingly. The slow growth is probably because of the fact that these children were not compelled by law to attend school. Even with the slow growth, by 1930 reports showed 354 cities of ten thousand population or more with organized schools or classes for the subnormal.[3]

The Gifted

In history we can find the names of many gifted people who have gone far and have done many remarkable things for their country in different lines--government, science and medicine, literature, the arts, and many other fields.

---

2. Ibid., p. 269.

3. Ibid., p. 270.

Not much had been done for them in the way of special education. In ancient times, Plato administered tests in order to discover the talented of Greece and trained them in accordance with their abilities. They were later to become the leaders of the state.

Suleiman, the magnificent, ruler of the Ottoman Empire, also had the most promising youths of the empire and of the conquered people selected and given special training so that they could be leaders in war, religion, art, and science.[4]

Hitler practiced this selection of the mentally superior for leaders in his preparation for World War II. He had them trained and specialized in every phase of foreign life.[5]

The first effort public education made toward providing for them was rapid promotion through the grades. This was first begun in St. Louis in 1867 by William T. Harris, Superintendent of Education.

Not until about 1920 did the modern period of special classes begin. Cleveland, Los Angeles, and Rochester were the first who began such classes. This movement has not spread very rapidly. In 1930 reports showed that only thirty cities out of 762 with 10,000 or over population had such classes or schools.[6]

Some cities have other provisions for caring for these pupils which partially make up for the lack of special classes.

---

4. Ibid., p. 288.
5. Ibid., p. 289.
6. Ibid., p. 290.

CHAPTER IV

PRESENT PRACTICES IN EDUCATION

Methods in Use

The provision for special classes is the most common way to handle mentally exceptional pupils. They are organized in two different ways:

(1) A special department is established with a director at the head and the classroom teacher under the director. In this type of organization the pupils are taken out of regular school and are no longer members of it, although they may be housed in the same building.

(2) The class is kept as a part of the regular school with the teacher a member of the regular faculty and directly responsible to the principal. The children are part of the regular school in sports, in play, in auditorium exercises, and in many other activities in which they can participate without being at a disadvantage because of their mental deficiency.[1]

Baker[2] and other educators believe that the mentally retarded pupil is much better off if he is segregated in all academic subjects because of the inferiority complex he is apt to develop if he is placed in competition with the average and rapid-learner; however, he can succeed in achieving the ability to read at third, fourth, or even fifth grade levels if steps are developed slowly and much repetition is made.

---

1. Arch O. Heck, op. cit., p. 347.

2. Harry J. Baker, op. cit., p. 253.

According to Maxwell and Kilzer[3] homogeneous grouping, unit assignments, variation in pupil load, and out of school projects and studies are other ways of providing for individual differences. All of the methods may be used to advantage in systems where no provision is made for special classes. Homogeneous grouping has been used extensively in the last few years; however, many lay people and some educators disapprove of this means. Variation in pupil load is probably the best method of dealing with this situation in the secondary school where there are no special classes.

Heck[4] gives Baltimore's program of providing for these children in special I. Q. groups which will be summarized here:

(1) Special center classes where pupils ranging from fifty to sixty-four in I. Q. and six to thirteen chronological age are grouped. These pupils are taught only the simplest skills. They usually begin to read at from ten to twelve years chronological age.

(2) Primary opportunity classes for pupils of I. Q.'s from sixty-five to eighty-five and chronological ages of six to eleven. This group is capable of doing much more and better work than the first group.

(3) Intermediate opportunity classes which set the pupils from the primary classes when they become twelve years of age.

---

3. Maxwell and Kilzer, op. cit., p. 57.

4. Arch O. Heck, op. cit., p. 349.

(4) Shop Centers for pupils with I. Q.'s ranging from fifty to eighty-five and chronological ages of from fourteen to fifteen years. They are usually able to do academic work of about fourth grade level. Their main activity is woodwork. The boys often leave this class to go to work in some skill he has learned.

(5) Advanced Shop Centers for youths of fifth and sixth grade academic level. A few from the Shop Center group enroll here and do advanced work. They are taught woodwork, sheet metal, simple electricity and household mechanics. They are capable of leaving here for self-supporting jobs, as most of them do.

All cities do not have enough pupils or sufficient financial support for this type program but it is a very good pattern for those who can follow it.

CHAPTER V

PROBLEMS OF ORGANIZATION OF SPECIAL CLASSES

Method of Choosing Pupils for Special Classes and Special Work

How shall the children who are singled out as being of the slow-learning and mentally retarded groups be selected? There need be more than one person's opinion or the results of one intelligence test to make a selection.

Heck[1] suggests that the teacher make recommendations to the principal who checks and then makes recommendation to the psychologist if there is one available. After this, group classification tests are given to the entire group. The results are studied and the Stanford Revision of the Binet-Simon test are given to those who do poorly in the group test. The pupils should be checked physically to ascertain whether there is a physical cause for their poor scholastic achievement which, if corrected, would probably improve their work. It is recommended that this examination be made before the tests are given, for often it is found that physical unfitness is the root of poor school work. Their scholastic records should be carefully studied for subjects which appear to be difficult, variations, and any inconsistency in low marks. Their social reactions at home and at school should be noted for poor adjustments.

After all these tests and studies have been made and the

---

1. Arch O. Heck, op. cit., p. 360.

child is found to be a candidate for special classes, his admittance is recommended by the psychologist.

Different places have different regulations as to who shall be accepted for special work but the range is usually from fifty or fifty-five to seventy for mentally retarded classes and from seventy or seventy-five to eighty-nine for slow-learning classes.

Special Equipment Needed in Schools or Classes

In these special classes which will include some industrial arts and vocational training, special equipment will be needed. They will include tools for woodworking classes: saws, hammers, benches, vices, drills, and many others, but they should be of the simpler type with no electric-powered ones requiring considerable skill to put into operation. A sink with running water is essential as well as racks for lumber and reed, a work table, sand-table, manual training benches, sewing machine and mirror. A phonograph with records for a march, dance and other types of music is very helpful. Also a shoe-cleaning outfit has been found to be beneficial. In some instances, beauty culture equipment has been added and used to advantage with larger girls who have gone out prepared to earn a living in this work.

There is an urgent need for plenty of cabinet space to store all the necessary equipment and supplies.

Some of the most needed supplies are dominoes and other games for social adjustment, colored beads, crayons, chalk, colored and white, plasticene or even common clay, pegs and

peg board, toy money and empty cartons for playing store, an easel and plenty of large sheets of paper. Many other things will be found useful if the financial situation is sufficient to purchase them and if the teacher of these classes has the ingenuity in using them effectively in the learning process and situation.

The Teacher

The State of Florida Certification requirements are:

> A special certificate for the exceptional child which calls for four years college training with fifteen semester hours work in the field of the exceptional child including six in the branch in which the teacher wishes to teach.[2]

In teaching the mentally slow, one would need six semester hours in that branch of exceptional children and nine in any of the other branches.

The teacher should be more understanding if she has taught normal children for a year or two. The teacher should not be old; however, neither should she be so young that she has not lived through a great many experiences which will help her to understand the difficulties of her pupils. It is not necessarily a requisite to be pretty, but the teacher should be well-groomed and attractively dressed in order to arouse a desire in her pupils to be like her and thus set an example which is important that they follow.

An unusual amount of patience is required as the students will be slow in learning and are very apt to make many mistakes which must be corrected. The teacher must have an exceedingly

---

2. Certification Bulletin, State of Florida Publication.

high degree of contagious enthusiasm so that she will be able to pick her pupils up and carry them away with her on the projects which she plans so enthusiastically.

She must be a person who is capable of taking a real interest in these underprivileged children who need all possible help. The teacher must be as alert to the physical, social, and emotional needs of these children as she is to their intellectual needs. She needs to be even tempered and to possess a sense of humor. She should be a truly integrated personality; she should lead the fine, good life.

In dealing with these children she should keep in mind these five points:

(1) The child's mental level,

(2) His academic history,

(3) His state of health,

(4) His heredity, and

(5) His general mental tone and attitude.[3]

Any anxieties, conflicts, special disabilities, character defects or psychopathic conditions must be discovered and treated immediately. Observations have shown that when these conditions were found and removed, or at least helped, that a very remarkable improvement in academic work and social adjustment was shown.

The teacher should remember that almost all of these children can be made self-supporting, although the work will have to be some type of unskilled labor. They will need to

---

3. Arch O. Heck, op. cit., p. 373.

develop regular habits of work, so that any work they can do will become a pleasure to them. The delight of successful achievement when they are given school work within their ability contributes immensely to further desire to work.

This feeling of achievement and desire to accomplish is often easily secured if a little understanding on the part of the teacher is used. Take the case of Amos, a boy who came to the investigator in the third grade a few years ago. He was overage and overgrown and had been given a very bad inferiority feeling in the schools where he had attended. He said very frankly that he could not do the work assigned to the class, and when asked what made him think he could not, he said the teachers had told him he just could not do it. He had been in the third grade almost two years. His parents had also joked about his being jumb at home until he was quite convinced that he could not do anything but sit and listen and that is all he would do. He made no effort to do any of the written work, in spite of all coaxing.

It was soon found that he could play a harmonica and he was given the opportunity to play for the class which, of course, made him quite happy. An assembly program was scheduled in the next few days and Amos and his mouth organ were to appear on the program; the boy was very pleased to be given the opportunity to demonstrate his ability. His playing was rather good for a boy of his age and a great point of praising his efforts was made. The class praised him also and wanted him to play again; at first he was permitted to play each day, after lunch, and then not quite as frequently. This made a great deal of

difference in the boy and he was overjoyed in the fact that he could do something that the other members of the class could not.

The teacher capitalized on this to get him to work in his school subjects. She told him that anyone who could play a harmonica so well could certainly do the little, simple things which were required in school and finally he believed her. He began to work and with a lot of encouragement from the teacher and the rest of the class started to do poor, and then better work until by the end of the term he could do just a little below class-average work.

This boy was just a slow-learner, but he should not have been called "dumb" for he was not. It was fortunate that his musical ability could be capitalized on and used as an incentive for him to do other work. The boy eventually finished junior high school and is now capable of making a living; this might not have been possible had he not been given a fair start several years ago.

Of course, all slow-learners will not be able to play a musical instrument, but most of them are capable of doing something that the teacher can capitalize upon to give them confidence in themselves and a feeling of security. All these children must be taught or helped to form good habits of conduct. If they are to be capable of living happily among their fellowmen they should learn to establish habits of personal cleanliness, of not disturbing the property of others, of self-control, of ignoring strangers, and of telling the truth.

CHAPTER VI

IMPROVED PROGRAM IN READING

Importance of Reading

Reading is generally recognized as one of the most important skills, for if a person reads with a degree of fluency, comprehending what he has read, he has a key which will unlock for him many store houses of knowledge. In books, one finds the adventures, the ways of life, and cultures often denied him in reality.

Reading as a separate subject is taught only in the elementary grades in most schools; therefore, it must be taught effectively. Definite responsibility for reading instruction must be delegated to teachers who are specially trained. Achievement is dependent upon ability to read--history, science, mathematics, geography, and all other subjects taught in school.

Reading is not a natural process; the habits necessary for efficient reading must be learned. The necessary habits and skills for effective reading should be learned in the initial period of reading instruction. The improvement and efficiency of these skills should be the aim of all further instruction in reading. Efficient reading depends upon:

(1) The ability to recognize printed symbols instantly, comprehending their meanings quickly and correctly, and

(2) The ability to assimilate the specific meanings, integrating and interpreting them in order that they may be used for information or pleasure.[1]

---

1. G. L. and Eva Bond, Teaching the Child to Read, p. 29.

The first step in efficient reading is the recognition of printed symbols both individually and in groups. This should then be followed by gaining a degree of speed, accuracy, and comprehension. If a child's speed is good, his reading efficiency depends upon the accuracy and completeness of his comprehension of the printed matter he reads. If his comprehension of printed matter is good, then his efficiency depends upon the speed with which he reads.[2]

Factors Which Influence Reading Readiness

Before beginning reading a mental age of six and one-half years is considered by many of our authorities necessary and therefore reading instruction should be delayed until reaching that mental age. Kirk[3] says the mentally slow child will not read until eight or more years old.

There are many physical factors which influence reading readiness. Among these are vision, hearing, speech defects, and others. It is the responsibility of the teacher to detect these physical difficulties and to make all necessary adjustments for them if it is possible to do so; if not, she should recommend that they be placed in a special class in which they will be properly cared for.

There are also personal and emotional factors which will influence reading readiness. If a child feels very insecure at home or if he has been partially or wholly rejected by the

---

2. Ibid., p. 30.

3. Samuel A. Kirk, Teaching Reading to Slow-Learning Children, p. 41.

parents, which is often the case with a mentally slow child, he will not adjust easily in school. Others will have parental conflicts in the home which will be responsible for emotional upset which will cause them to be inattentive and easily upset. These children must be helped to acquire new skills and experiences which will give greater ease and a feeling of successful achievement which in turn will give a feeling of security which will in part offset the conditions at home.[4]

In addition to these, there are a number of educational factors which also influence reading readiness but which can be modified to some degree by education. They are as follows:

1. Backgrounds of understandings
2. Extent of vocabulary
3. Accuracy of speech patterns
4. Quality of oral English
5. Ability to attend
6. Ability to sense a sequence of ideas
7. Ability to follow directions
8. Ability to handle equipment
9. Desire to read.[5]

These educational factors are greatly influenced by the type of home the child comes from. If the parents have good vocabularies, good speech habits, and have not used baby talk in talking to the child, he will be better prepared when he enters school.

---

4. G. L. and Eva Bond., op. cit., p. 30.
5. Ibid., p. 31.

The child who has had stories read to him, picture books to enjoy, carried to places of interest, and allowed to use crayons, pencils, chalk, paper, scissors, and other materials is better able to cope with situations in school. He has a wider variety of experiences which results in a higher degree of readiness for reading.

The experiences the child has had will be responsible for the meaning he gives to words. Take, for instance, the word horse and picture the different meanings several children might give it. The child who has lived on or visited a farm will visualize a living horse used probably to pull a plow or to ride. Another child has a rocking horse he has enjoyed for some time and this is his mental picture of a horse, while still another may have ridden the merry-go-round in the amusement park and he visualizes the horse on this. A fourth may have a nice plush horse with a silken mane and tail and this is his mental picture of a horse. A fifth child may be familiar with the carpenter's horse and visualizes this object when he hears the word.

Appraisal of Reading Readiness

There are many types of appraisals for reading readiness including mental and reading readiness tests.

In the case of the mental exceptional child which is being considered in this dissertation, the mental tests have necessarily been given before the child was placed in a class of slow-learners or retarded pupils.

Other examinations by psychologists are usually given before a child is placed in a special class. If so, the records

of these tests and the findings of the psychologist should be made readily available to the classroom teacher. These records should give her some of the necessary information concerning reading readiness but it will not be sufficient. She will need to give a reading-readiness test before beginning the teaching of reading.

In a class of slow-learners and of mentally retarded pupils, the range of intelligence will probably not be greater than it would be in a so-called normal class since the I. Q. ranges usually included in classes of this type are no greater. The reading readiness variation will probably be greater, making it necessary to have several groups, but since the classes are smaller, this is easily possible.[6]

After the classes for slow-learners and mentally retarded pupils have been organized, the mental and reading-readiness tests given and groups formed, the teaching of reading for these pupils may be done about the same as for a group of normal children but at a slower pace since they progress at a much slower rate of speed.

Pre-Reading Instruction

The first semester of grade one for normal children is usually spent in pre-reading instruction but for the mentally exceptional group this period may need to be longer. The form of instruction used in this pre-reading period takes into account the factors that affect proficiency in reading. It should

---

6. Samuel A. Kirk, Teaching Reading to Slow-Learning Children, p. 67.

include cutting, pasting, coloring with crayons, painting at the easel, building with blocks, doing block puzzles, clapping to rhythms, playing rhythm games, and playing with toys for muscular coordination. Training for eye coordination by matching colors, pictures, and the parts of jig-saw puzzles; training in the use of left-and-right directions by pointing, by playing games, and using tools that require the consistent use of a definite hand and giving directions; teaching visual perception by drawing, painting, observation of objects and by choosing like or unlike objects should also be included. Hearing acuity should be aided by phonetic games and by clear enunciation and correct pronunciation by the teacher.

Varied social experiences such as group playing of games and initiating games of the pupils, dramatizing stories, celebrating holidays, giving parties, sharing possessions, doing simple housekeeping tasks in classrooms, and taking part in group discussions in turn and listening while other pupils talk are all aids to a reading-readiness program.

Nature may be used to play an important part in this program by ingenuity and planning on the part of the teacher. Planned excursions to the woods, to the zoo, or to the various places where animals or plants may be observed, planting flowers in the school yard or window boxes, bringing pets to school for observations and care, studying proper ways of caring for them, observing cocoons that are kept in the classroom, and making feeding stations and baths for birds are other helpful experiences.

Concepts of the seasons may be secured by observation of trees and plants in certain seasons, making and keeping a large calendar by weeks, noting seasonable plants, and by making pictures and booklets of the seasons. Many such planned projects and studies may easily be carried out in the regular classrooms.

Music and art both offer many opportunities for self-expression in this period. Listening for appreciation and the rhythms is work that may be used in many situations to provide experiences.

Story telling is very effective for associating new meanings with the words and gaining enjoyment and a knowledge of familiar literary characters. Story telling by the pupils in which they describe experiences such as excursions and trips is also a help in constantly building the vocabulary. Playing store, playing with a toy radio or telephone, composing group and individual letters, creating stories, poems, and riddles, and planning constructions are also means of increasing the vocabulary of children.

General Methods of Teaching Reading

Before discussing the methods and techniques which should be used, let us consider the principles of effective teaching. They are: Learning to read should be a pleasant experience for the child; the child should not be allowed to experience repeated failures; individualization of instruction should be provided for; favorable attitudes toward reading should be

developed; the purpose of reading should be real to the child; the child's interest should be aroused; the child's initiative should be used and encouraged; the other educational outcomes should be developed; materials should be plentiful and graded, and the progress should be set to the pace of the pupil.[7]

Interest in reading and initiative in beginning to read may be secured by allowing the children to browse through picture books, to listen to the older children read, to listen to the teacher read interesting stories, to compose stories that are printed on the board, and to read labels under pictures and objects displayed in the classroom.

There are a number of methods of teaching reading in use at the present time, the most common being the word method and the sentence method. The alphabet and phonetic methods have not been in common use for several years. In the word method, the usual presentation is for the teacher to put a word on the board, pronounce it for the class and then have the class pronounce it. Flash cards and picture cards with the word printed underneath are used with this method. It is good when used with other procedures but may lead to difficulties if used alone.[8]

The sentence method, which was designed to emphasize the meaningful nature of reading, like the word method, is apt to

---

7. Ibid., p. 49.

8. Arthur I. Gates, New Methods in Primary Reading, p. 28.

lead to difficulties if used alone.[9] This method begins with the teacher printing a sentence on the board, reading it and having the class repeat it both collectively and individually. Word discrimination is introduced by varying the words in a sentence, as: Baby loves mother. Baby plays with mother. This method lends itself readily to memorization of the story, often developing pupils who apparently are very fluent readers but who are found to be only repeating the story from memory.

Gates[10] has developed what is called the intrinsis method which resembles both the word and sentence method to some degree. In this method all of the words to be used in the first stories are introduced in pre-reading exercises of pictures and matching exercises. Drawing, coloring, cutting, and pasting, are used in connection with reading in a pre-primer, primer, and the first reader. This or a similar method which combines both word and sentence is best adapted to the slow-learner.

Method For the Slow-Learner

The pre-reading period for the slow-learner will necessarily be much longer than for the normal child. In the last stage of this pre-reading training, and for the beginning of word recognition, Kirk[11] recommends playing Bingo, a game described in the following paragraphs, and in the figures on pages 29, 30 and 31.

---

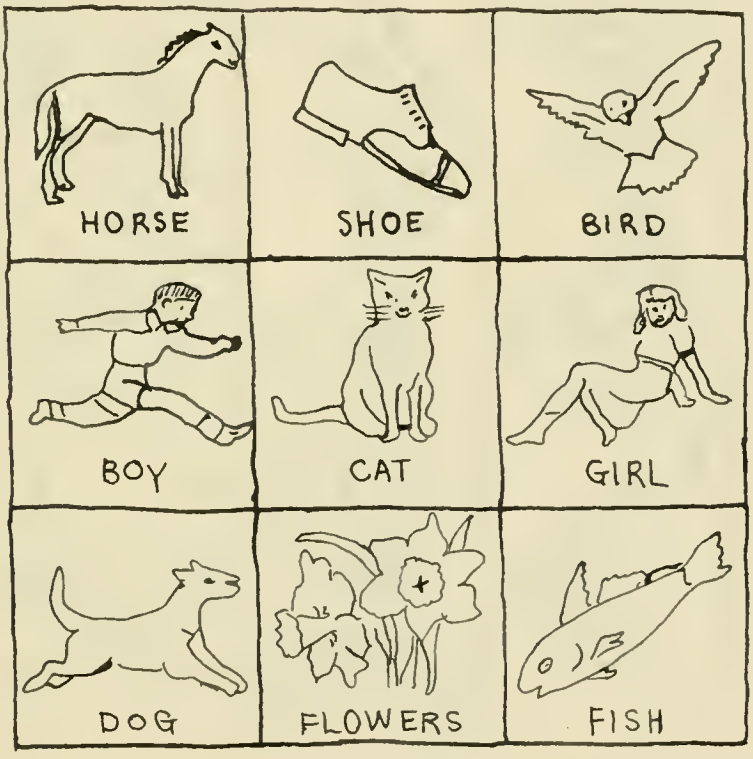
9. Ibid., p. 29.

10. Ibid., p. 30.

11. Samuel A. Kirk, Teaching Reading to Slow-Learning Children, pp. 62-65.

Procedure I

The teacher and pupil have cards which are alike. The teacher cuts her card into nine smaller cards. The child is given his as one card. The teacher presents the shoe card and the child places a bead on the matching one. This continues until the child's card is filled with beads.



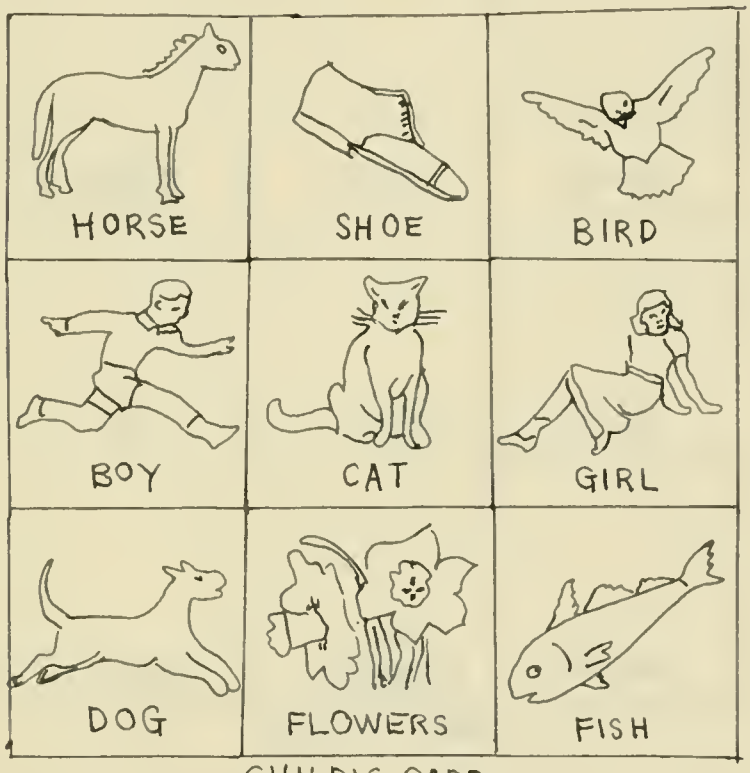
CHILD'S CARD

TEACHER'S CARDS

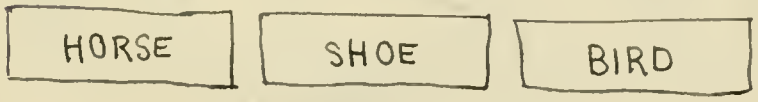
Figure 2.

Procedure II

In this game, the teacher's card has only the word and the pupils match the word with the word and picture on their cards in the same way as for Procedure I.



CHILD'S CARD



TEACHER'S CARDS

Figure 3.

Procedure III

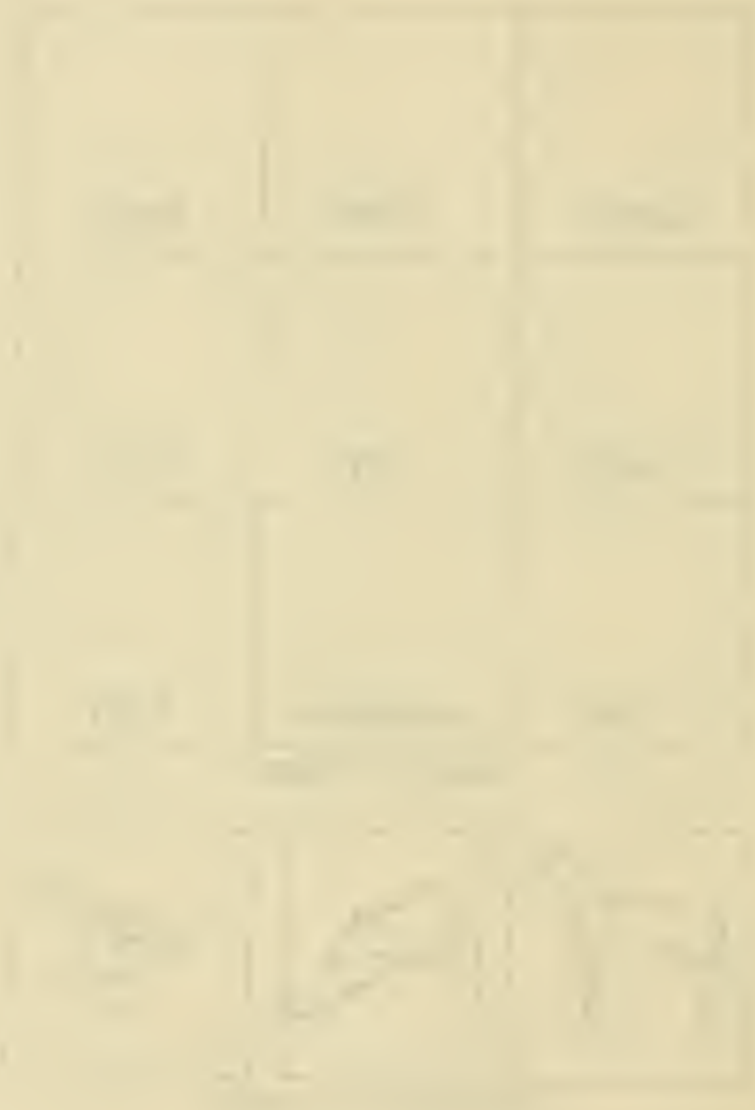
This follows the same play as before but in the game, the child's card has the word and the teacher's card the picture.

HORSE	SHOE	BIRD
BOY	CAT	GIRL
DOG	FLOWERS	FISH

CHILD'S CARD

TEACHER'S CARDS

Figure 4.



After sufficient drill and pre-reading training to secure a readiness for reading the initial stages of reading should be started. Kirk[12] recommends the incidental method and the systematic experience method, both of which make use of sentence, phrase, and word recognition.

The experience method is very good for these slow-learners particularly if they have been in classes for normal youngsters and have used the pre-primers and primers without learning to read. They will consider it infantile and feel very indignant if asked to read it.

A typical experience lesson follows. The children had made a trip to the zoo the preceding day and had written a story about it in this way:

WE WENT TO THE ZOO.
WE SAW A LION.
WE SAW AN ELEPHANT.
WE SAW A BEAR.

This is written in manuscript on the board and the children read the sentences. The story is left and the children read it again the following day before a new story is written.

This story is then transferred to a chart for further reading and a new story is written. This method is continued often from six to ten weeks with each story being added to the chart for later reading. Few new words should be used from day to day.

If the children object to the chart as infantile, the

---

12. Ibid., pp. 83-92.

moving picture method may be used to take its place. In this method a large box about the size of a reading chart is used. It has a roller at each end, so constructed that a roll of reading materials may be attached to both rollers so that when the crank is turned, the chart is unrolled and the stories are seen and read one at a time.[13]

Each child may have a story of his own about a pet, a toy, or a baby brother or sister he has at home. This would add more interest, for hearing the other children tell their stories would be an individual interest. As the stories are moved, each child is allowed to read his own story. These stories may be mimeographed and each child given a copy so that he can make a reading book. These may be illustrated by drawing or pasting cut-out pictures on the sheets and then binding them to keep or take home to read to his parents. This booklet method should be continued longer if the children are repeaters and have been given the pre-primers and primers on this reading level. If they were placed in special classes at the beginning of their school experience, they may be given pre-primers and primers at this stage of their progress.

Regardless of the reading material being used, the teacher should begin to emphasize words by having them pick out words in the sentences, and cut apart and match parts of sentences in activity exercises.

After an extensive program of chart reading, some books should be introduced. They should be books the child has not had

---

13. Ibid., p. 88.

before but should be on a level with his ability to comprehend.

The slow-learner should be given a good basic vocabulary. What is a good basic vocabulary? Gates[14] after an analysis of primary readers, has selected a list of 1,811 words that appear most frequently. Kirk[15] gives Dolch's list of 220 words not including nouns that all children should know. Stone[16] has selected 150 important words which he says should be taught before books are introduced.

The teacher of slow-learning children should be familiar with all the word lists so that she will be sure to include all the most important ones in the beginning work of her pupils.

The slow-learners are more often word callers than are normal children and for that reason it is necessary to provide seat work and other types of exercises to secure a better comprehension of what has been read.

Most teachers who have taught any lower grades in the last four or five years are familiar with some of the many types of good seat-work material that can be found in mimeograph work books, regular work books that go hand in hand or parallel with readers, or have made their own copies from the reading materials; but for those who are new in the teaching profession, a few suggestions will be given. Some of the simplest types are these:

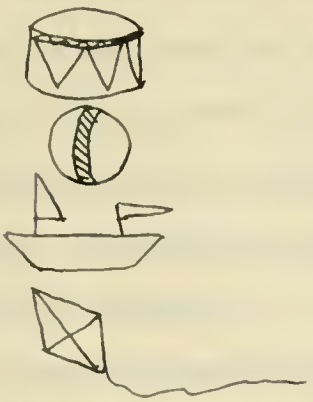
---

14. Arthur I. Gates, A Reading Vocabulary for the Primary Grades, pp. 1-29.

15. Samuel A. Kirk, Teaching Reading to Slow-Learning Children, p. 96.

16. Clarence R. Stone, Better Primary Reading, pp. 50-53.

1. DRAW A LINE FROM THE WORD TO ITS PICTURE.



B A L L

B O A T

K I T E

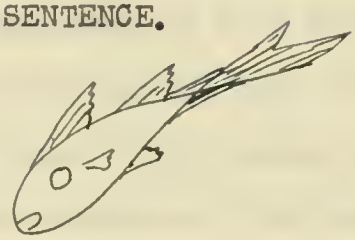
D R U M

2. DRAW A LINE UNDER THE RIGHT SENTENCE.

I CAN FLY.

I CAN RUN.

I CAN SWIM.



I CAN SLEEP.

I CAN JUMP.

I CAN FLY.

3. COLOR THE PICTURES.

RED BLUE ORANGE BROWN GREEN

4. DRAW A RING AROUND THE LITTLE BALL.

DRAW A RING AROUND THE BIG STAR.

DRAW A RING AROUND THE LITTLE TREE.

5. DRAW MY PICTURE.

I AM A KITTY. I AM LITTLE.
I AM YELLOW. I HAVE A WHITE SPOT.

Figure 5. Seat-Work

There are many others which can be used and which increase in difficulty as the child progresses. Most of the readers in use now either have work books that accompany them or suggested seat work in the teacher's manual which is very helpful in securing comprehension and providing for practice in silent reading.

There are many opinions as to how much time should be allotted to silent reading and how much to oral reading, but Kirk[17] and others in this field have agreed that if oral reading alone is used, we are apt to have slow readers and word callers who do not comprehend the content of the printed material they read.

In teaching the slow-learner both is necessary. Much individual attention is necessary also, for even though the children are grouped, these individual problems will be presented according to the different abilities of the individual pupils. Having each pupil read to the teacher individually when first beginning book reading, is very desirable. Choral reading may also be used effectively with this group. It affords a social period and is also good practice in pronunciation for the poorer ones, who will be carried along with the better.

When a child learns to read a selection without errors, he will enjoy reading it for the class. For this audience reading, a short story the whole class is not familiar with

---

17. Samuel A. Kirk, Teaching Reading to Slow-Learning Children, p. 127.

should be selected. This will give the child a feeling of having contributed something to the group and he will become more secure.

After a vocabulary of about 100 words has been acquired and the children have begun to read, ear training and phonctic instruction are begun in some school systems although it is a much disputed issue. Kirk[18] found it worthwhile and recommends it for the slow-learner.

There are many ways of beginning this work: one of the most common being word families such as cat, rat, fat; man, can, ran, and many others. The mentally slow child should be taught the sound of each letter; otherwise he is apt to have a fixation of certain sound combinations. For example, if he has learned s--at, c--at and is given c--ap, he will tend to say c--at--p. Or if presented with ca--t, ca--p, and is later given co--b, he will tend to read it ca--o--b.

Easiest phonic configurations should be introduced first and gradually worked up to the more difficult ones with the slow-learner. The ones that appear most frequently should be given importance in the beginning also.

There are many devices such as games, seat work exercises, and drill cards that will make this phonetic drill more interesting and effective. Some of the most important, according to Harris[19] are:

---

18. Ibid., p. 117.

19. Albert J. Harris, How To Increase Reading Ability, pp. 255-256.

Lucky Wheel

(Both the inner and outer circles can be rotated)

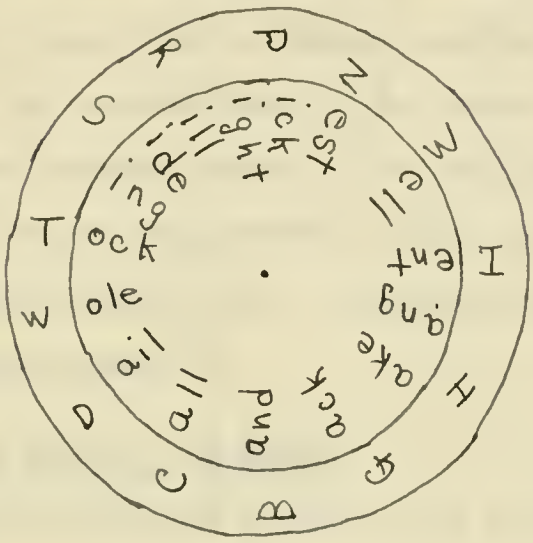


Figure 6. Phonetic Drill

Rhyme Making

Rhyme making lines from several verses are printed on separate strips. The child is to pick out all the lines which end in the same sound and assemble them into a little poem. A sample verse is:

THE INDIANS ON THE HILL,
LED BY BIG CHIEF BILL,
ARE STANDING VERY STILL,
FOR THEY ARE OUT TO KILL.

Syllabication, suffixes, and prefixes should also be taught, always remembering however, that word recognition is not an end in itself and that comprehension should be emphasized.

After having secured a good beginning in reading, the slow-learner will progress much the same as a normal child but at a slower rate. His advanced reading will be on about the same level as that offered in the third, fourth, and fifth readers in regular school. Few children in the slow-learning group finish high school unless it is a special school where vocational work is stressed and all of the work is keyed to their speed.[20]

Methods for the Mentally Retarded

The mentally retarded child cannot be expected to accomplish much in the way of education, but it is the duty of the school system to help him accomplish that little which he can.

Whipple[21] lists seven types of materials that should be stressed in teaching this group to read. They are:

(1) Common signs, of which she lists one hundred fifty;

(2) Labels, especially of foods and medicines;

(3) Advertisements and notices;

(4) Location of informational items in telephone books, catalogues, and time tables;

(5) Instructions of various kinds;

(6) News items, especially the weather reports, sports, and headline news; and

(7) Letters that are sent to them. The emphasis has been placed on items of practical value.

---

20. Samuel A. Kirk, op. cit., p. 138.

21. H. D. Whipple, Making Citizens of the Mentally Limited, p. 89.

The methods used will be the same as those used with the slow-learner with the addition of much drill and possible stress on different words. They are slower to comprehend; therefore, if any degree of comprehension is to be secured, there will need to be much patience, practice and individual assistance used in teaching them.

According to Kirk[22] few of this group will go further than the fifth grade and most of them will drop out by the end of the third grade, hence reading materials on the level of the third and fourth grade will be advanced reading for them.

---

22. Samuel A. Kirk, op. cit., p. 137.

CHAPTER VII

SPELLING

Importance of Spelling

Although this discourse is concerned primarily with the teaching of reading, writing, and arithmetic, spelling is related so closely to writing and reading that this paper would not be complete without including it.

Why is spelling so important? What is its function? Its function is to see that letters come in their correct order in words. The purpose in teaching it is to form the habit of writing correctly, easily, and rapidly the words which a person wishes to use in conveying a message to others.[1]

In business transactions, people are judged often by the type of letters they write. A misspelled word is always noted and an opinion formed concerning the education of the writer. Many people have failed to secure positions for which they were applying because in their written application, words were misspelled carelessly.

Inaccurate spelling means a failure to convey the intended meaning and this inaccuracy may mean dollars to the individual who thus fails.

As stated previously, the main object of good spelling is to be able to write correctly ideas which we wish to convey

---

1. C. C. Schmidt, Teaching and Learning the Common Branches, p. 98.

to others. We are seldom ever called upon to spell a word orally, although it might be necessary occasionally. Schmidt[2] says that in order to be a good speller, the writer must have (1) a knowledge of the spelling of the words, (2) the habit of writing them correctly when intent on the thought he is recording, and (3) the proper attitude toward correct spelling.

The Relation of Spelling to Reading

Although spelling assuredly is not reading, it is related closely to it. Poor readers are generally, but not always, poor spellers and conversely poor spellers are almost always poor readers.

When reading was taught by the letter method, pupils learned to spell first and then to read. With the newer methods of reading now in common use, the child is taught to read first and spelling is delayed until the last half of the second grade or until the third grade in many instances.

A child does not have to know how to spell in order to recognize words and to be able to read them. Word recognition is necessary, however, before there is any need for spelling since there is no value in being able to spell a word which he does not know how to use.

The improved methods of teaching reading have made much better readers of our pupils but they have tended to make poorer

---

2. Ibid., pp. 99-100.

3. Ibid., p. 102.

spellers. There is not as much transfer from reading to spelling as there was with the old letter method of teaching reading.

When phonics have been stressed in the second stages of reading, better spellers are secured than when they are taught in a careless unplanned way.

Reading is often a big asset in motivating a desire to spell. If the child reads a story which interests him, he will like to answer short questions about it or write a summary of it.

Method of Teaching

In general there are two methods of teaching spelling, the oral and the written. The oral method has very little value since the child will seldom be called upon to spell a word aloud, but he will use them written in all subjects through school. There are some children who learn quite easily by the oral method for they use their auditory capacity to fix the word in their memory; however, others lose their image of the word completely when they start to spell aloud.[4]

The method of having children copy words while learning them is also used by many teachers with equally good and bad results. In the case of the non-visual child, the eyes move back and forth from the copy to his writing until the word is broken up as badly as if he were saying the letters.

These are the methods generally used in teaching spelling,

---

4. Grace M. Fernald, Remedial Techniques in Basic School Subjects, p. 167.

but, of course, none of them will work for all pupils for each one is a distinct individual with very different characteristics and ability to learn.

Teaching spelling to any group necessitates much drill and still more drill is needed for a group of slow-learners. Many of this group have no incentive to learn at all since they cannot see the need.

Fernald[5] cites the case of one child who just did not want to spell. When asked what he wanted to do, he said he liked to draw so he was allowed to draw. He drew a very nice picture of an airplane which the teacher praised highly, but tactfully suggested that it would be a much better drawing if he labeled the parts of his plane. This he did, working very hard at the job of spelling. He learned these and many other words through his interest in drawing. When he returned the following year, they were able to take him out of the remedial class.

Fernald also lists several remedial methods of teaching spelling. The auditory method whereby the word is sounded slowly and written on the board as it is being pronounced is used effectively in many instances. The child pronounces it slowly after the teacher, looks at it, and then sees if he can write what he says as he pronounces it again. If the word is long, the teacher may underline the syllables as the child says them but it should never be broken up as the

---

5. Ibid., p. 169.

teacher writes it. It must be the special work of the child.

If the child is mentally capable of taking a word of several syllables such as department he will gain more confidence (which is lacking in most of the slow-learners) in himself by having learned to spell it.

After the teacher has underlined the syllables in the word, the child writes it as a whole but saying de while writing the first syllable, part while writing the second, and ment while writing the last one. A number of phonetic words should be taught by this method and then the teacher should explain that there are other words which are not phonetic but must be learned also. Then slowly teach the non-phonetic words.

If this method does not work, then the hand-kinaesthetic method may be tried. The teacher writes the word large with a crayola and allows the child to trace it with his fingers as he says it. He is allowed to do this as many times as he wishes. Then he is permitted to write the word. Progress may be slow at first, but good results are had in the end.

There are eight important steps in teaching spelling to a group:

1. The word to be learned should be written on the blackboard or on paper by the teacher.

2. The teacher pronounces the word very clearly and distinctly. The children pronounce the word.

3. Time is allowed for each child to study the word. Some will want to trace it. The tracing should be done with the finger rather than with a pencil or stylus.

4. When every child is sure of the word, the word is erased or covered and the child writes it from memory.

5. The paper should be turned over and the word written the second time.

6. Some arrangement should be made so that it is natural for the child to make frequent use, in his written expression, of the word he has learned.

7. Finally it is necessary that the child be allowed to get the correct form of the word at any time when he is doubtful of its spelling.

8. If spelling matches are desired they should be written instead of oral.[6]

In spite of all of the drill and teaching, a teacher gives the child an opportunity to learn by allowing him actually to do the work. Fernald[7] lists eight steps in directions for the child. They are summarized below:

1. Look at the word very carefully and say it over to yourself.

2. See if the word can be written just the way you say it.

3. Shut your eyes and see if you can get a picture of the word you can remember the parts that are written the way you say them by pronouncing the word over and over again, either silently or orally, visualizing it to yourself, of feeling your hand make the movements of writing the word.

4. When you are sure of every part of the word, shut your book or cover the word and write it, saying each syllable to yourself as you write it.

5. If you cannot write the word correctly after you have looked at it and said it, ask the teacher to write it for you with crayola on a strip of paper.

---

6. Ibid., pp. 199-201.

7. Ibid., p. 203.

Trace the word with your fingers. Say each part of the word as you trace it. Trace the word carefully as many times as you need to until you can write it correctly. Say each part of the word to yourself as you write it.

6. If the word is difficult, turn the paper over and write it again.

7. Later in the day try writing the word from memory.

8. Make your own dictionary. Write the new words you learn, or any words that seem especially difficult to you in this book. Look these words over from time to time, writing those that seem difficult.

As the child grows older many of these steps may be omitted. In most cases, tracing will become unnecessary. Artificial devices are not considered to be of much value at the present time but some spelling games may be used to gain skill. The slow-learner should always be pitted against himself, never put in competition where he will be the loser for, in the beginning, he is suffering almost always from a feeling of inferiority.

The spelling rules which have been given so much stress for the past half century are said to have some value for older children but there are so many exceptions to most of them that the words have to be learned almost individually.

Spelling should be not only the concern of the teacher who is assigned to teach it, or in the lower grades stressed only in the spelling period, but it should be correlated with all other subjects. In mathematics, the child should be taught to spell the key words correctly and in history, geography, and science spelling is equally important.

CHAPTER VIII

WRITING

Importance of Writing

Writing is a means of communication. Up to the time of the invention of the typewriter and printing presses, it was almost the only means of preserving records and handing down important facts about culture and history. Before writing, much of culture and folklore was handed down by the oral speech method of communication but much inaccuracy developed in this method.

If the old parlor game of gossip has ever been played, it will readily be understood how this would happen. In this game, a leader whispers something to the person sitting next to him and he in turn whispers it to the next and so on around the room until it returns to the person who began the game. The leader is often unable to recognize anything in the sentence which he had said in the beginning. This is what often happened to stories or historical events which were handed down by the oral method.

There have been old forms of writing: picture writing or drawings, hieroglyphics, cuneform, and finally letters in existence for many thousands of years and because of them, we are able to read of many events which took place in ages past.

The function of writing then is to provide sufficient mastery of letter formation to make the individual capable of communicating with others. The communication might take a num-

ber of forms: a friendly letter, a business letter, a report of work taken in school, record of an important event as a family record in the old family Bible, wills, and many others.

Teaching of writing does not require a long period to be used daily. The author knows from experience that in working with beginners very satisfactory results may be obtained with a minimum amount of practice.

Teaching of writing is very important for if the letters are formed in a careless manner, the desired meaning will not be conveyed. Cole[1] cites a long list of errors that will result in a misconception of the word, for example, the letter a like u results in hut for hat; a like o results in cot for cat; a like ce results in cell for all.

Cole also lists many other instances of bad letter formation which will cause illegibility, but this example should be enough to show the importance of correct letter formation if the desired idea is to be conveyed.

As was mentioned in the chapter on spelling, many instances of individuals failing to secure positions might be attributed to poorly written applications. Poor spelling was mentioned as a chief cause but a letter which was not written in a good legible form would be as bad as one with misspelled words. What business man would want to hire a person who could not write a letter which would convey the desired meaning?

The importance of teaching handwriting so that each person

---

1. Luella Cole, Psychology of the Elementary School Subjects, pp. 129-131.

will be able to express himself legibly cannot be stressed too much for it is one of the most important of our basic school subjects.

When to Begin

For many years, writing was begun immediately after entering school but in many instances is now delayed for a short while. Some think the child needs to get partially adjusted in school before he is ready to be given the task of writing.

Cole[2] says there is a readiness for writing just as there is for reading and that this readiness is not highly related to the I. Q. or to the social competency of the individual; it is a matter of muscular and nervous control. Cole gives a test for readiness to begin handwriting which is very simple. It consists of a chart or sheet of paper with the following series of forms shown in the chart either printed or mimeographed on one side:

Chart

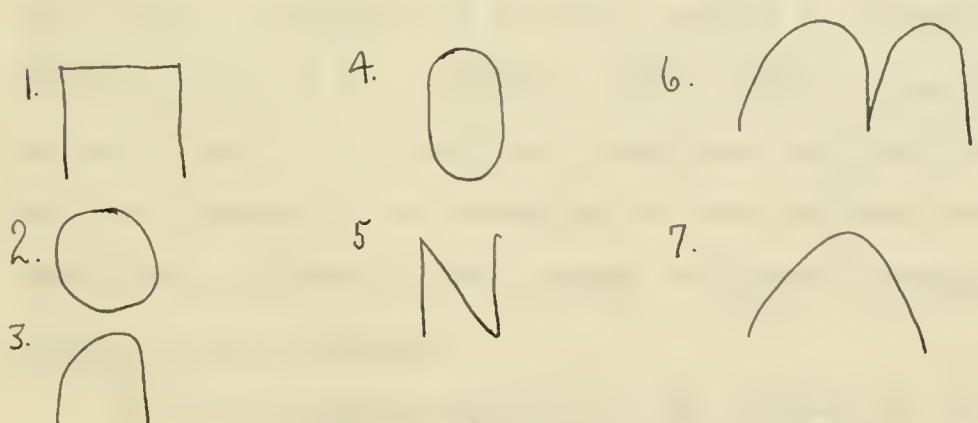


Figure 7. Writing Readiness Test

2. Ibid., p. 126.

The child is given a pencil and is told to copy each figure three times on the blank portions of the sheet; the copying is freehand and there is no time limit. If the child can copy five of the seven characters successfully, having reasonably good proportions and steady lines, and if a definite attempt is made to copy the remaining two, the child is ready to write. This test shows that he has the control necessary to copy from a model. Since it is necessary to understand and follow directions, a mental age of at least five and a half is needed before beginning handwriting.

In working with the slow-learner, this test for writing is very important since he may become emotionally upset if he is forced to begin writing before he has proper control of his muscles. Of course, it is imperative that we have some method of learning when the child is ready to begin. Careful observation by the teacher will often show her whether a child is ready to begin writing or not.

The writer has taught children who came to school at the age of six, incapable of holding pencils or crayons in their hands and making the simplest kind of marks. The cause was probably due to the fact that they were children who never had the opportunity of handling or using either before this time; but, whatever be the cause, they were certainly not ready to begin writing.

It is the responsibility of the teacher to find out which of her pupils are ready to begin writing and which are not. No child should be forced to try to write when he is not ready.

If he does not have the needed muscular control, he will most likely become nervous and upset with the strain of trying to write.

Types of Writing

There are only two kinds of writing in common use today, manuscript or simplified printing and script.

There are arguments for and against the use of both of these.[3] Those who favor the manuscript method contend that the child must learn two alphabets if he writes in script and that this is not necessary. If he is taught manuscript writing from the beginning, the child can copy words directly from the book without having to translate them into another alphabet. Two important objections to manuscript are: (1) it is tiring since it involves a large degree of finger movement and a vertical angle, and (2) it is slower and makes it necessary to spend unnecessary time in writing.

Conversely those who favor the script method contend it is faster, and less tiring since there is a continuous movement for each word. The two big disadvantages being that two alphabets have to be learned and that the child must learn both before he is able to copy words which he wishes to use from his book.

The current common practice in Florida and also in many other states is to begin the child writing manuscript. He is kept at this through the entire first year and until the middle

---

3. Ibid., p. 128.

of the second year when he is started on script.

There are some objections to this practice. Many contend that there is much difficulty in transferring from one method to another but the author used this procedure for a number of years and very little difficulty was encountered in the transfer process.

Many of the letters are formed very much the same and the new procedure of joining letters is soon learned. Most children are quite happy over the fact that they are writing like adults or high school students they come in contact with.

This practice of using both methods offsets many of the arguments against both. For instance the child is able to begin writing words from his book immediately by using the manuscript method and by the time he needs to acquire much speed in writing he is transferred to script which is much faster than manuscript. At the age he is transferred, he has very little difficulty in learning the new alphabet since there is so much similarity between the two.

Methods of Teaching

In teaching writing, as in the other school subjects, the pupils must be motivated to want to learn. Some will come to school eager to learn to write because they have older sisters and brothers who write and they want to learn to do what they can do or maybe they will each want to write like Mother or Father, while still others will come who can see no reason for writing and will have no desire to learn to write. This latter group is the group that must be motivated.

Writing one's name and suggesting that each pupil write his or her name will often start a child to writing in the beginning. Some will imitate the teacher or other boys and girls who have already started writing and still others will be hard to persuade to attempt to write at all, as was the case of Ronald who started to school at the usual age of six years.

Ronald had a normal I. Q. of ninety-eight, and immediately began to make progress in all his work except writing. When given a copy of his name or of a letter he would say to the teacher, "Miss Smith, I can't make it." He was encouraged to try, but never forced to make an attempt. Finally, after four or five weeks, the teacher noticed that he showed an interest in her grading papers with the grading pencil which was red at one end and blue at the other. She offered it to him for his writing lesson. He was very pleased and Ronald wrote with it. He was soon doing good writing for a beginner. Of course, he was praised by the teacher and some of the pupils which gave him confidence in himself. He used the red pencil a few days and was then ready for a large, black pencil like the other children were using. Now Ronald is an adult and writes well.

Artificial motivation is often helpful when working with small children. Motivation in older children is secured more easily. They will practice freely just for the sake of improveing their own handwriting, especially if they are given a standard scale for judging their work.

The first thing of importance in teaching writing is the

position. The child must be comfortable if he is to write well. This is more true of the mentally slow child than of the normal for his interest span is much shorter. He should be seated at a desk low enough for both feet to rest on the floor and both arms from the elbows to the wrist on the top of the desk. He should face the desk squarely with the paper directly in front of him. The paper should be tilted to the left, the lower edge making an angle of thirty degrees with the edge of the desk and the writing should slope to the right about the same amount. The forearm should form a right angle with the base line of the letters. The child should not be tense. The pencil should be held loosely, not gripped.

There are four forms of movement used in writing: (1) the whole arm movement, (2) finger movement, (3) arm movement with rest or muscular movement, and (4) combined arm and finger movement.[4] The last of these is the one most commonly used in public school systems at this time. In this movement, the arm rests on the writing surface and rotates upon the arm muscle below the elbow, carrying the hand along the line and forming the groundwork of the letters. The finer details of the letters are formed by the fingers.

All pupils will not be able to follow the same movements and forms and no one should be adhered to emphatically. There are individual variations in children, especially in the groups we are considering, and the important thing is that the child be relaxed and comfortable.

---

4. Ibid., p. 130.

For beginning writing the material should consist of wide lined paper and large beginner's pencils. The paper for grade one should be one-inch ruled; for grade two, five-eighths; and for grade three, one-half inch lines. The surface should be rough. Pencils should be soft as well as large.[5]

Writing at the blackboard is also good for beginners. Most children like to write on the blackboard, so less motivation will be necessary when it is used. The board and chalk rails should be properly placed for the size of the child so that he will not tire in writing. A half piece of chalk is best for small hands.

Whether the writing is done at the child's desk or at the board, the procedures are the same. The teacher first writes the letter on the board and analyses it. That is, if it is an A show that at first it is a slanting ring with a tail. She then makes it in the air, using the correct strokes. She has the pupils make it in the air with her several times before attempting to make it on paper or on the board.

This procedure followed by much individual help as the child requires it, is found to be quite effective in most cases; however, there will be some children who will not respond to it.

The old copy book method of giving the child a copy at the top of the page and having him copy it works well with some pupils. As in the other procedure, much individual help is necessary.

---

5. Ibid., p. 131.

Fernald[6] uses the Kinaesthetic method. The word is written in large letters with crayola on a strip of paper and given to the child. He then must trace the word with one or two fingers of his dominant hand. The teacher is careful to see that he uses the correct general direction, for example, that the child follows the proper course in making A's and D's and other letters. The child is given only the words he asks for in writing the little story he wishes to tell.

Motivation is secured by printing the stories for the children again after they have finished them. They are placed on the reading table. Even adults like to see things they have written in print, and children are no different. They like very much to have their stories printed and will work hard to finish one for the reading table. This is primarily a remedial method but works well with some slow-learners and mentally retarded children.

It is the responsibility of the teacher of these slow-learning children to find a procedure to which they will respond and to take them as far as they are capable of going.

The Left-Handed Child

Baker[7] says there is a certain type of confusion or block-

---

6. Grace M. Fernald, Remedial Techniques in Basic School Subjects, p. 167.

7. Harry J. Baker, Introduction to Exceptional Children, p. 197.

ing present in most left-handed people. It centers around the problem of when to use or not to use the right hand. Since the slow-learning child is often emotionally unstable and easily upset, much care should be used in handling the left-handed child in the group. He states also that emotional disturbances often arise among children who have been forcibly changed in their handedness.

The teacher should not try to change the handedness, but should strive to provide for the child so that he will be at as little disadvantage as possible.

To give the child proper light so that he will not shade his work, he needs a desk turned in the opposite direction to the children who are right-handed. He will take the same position in reverse order as the right-handed child. He should tip his paper to the right, his left arm should be at a right angle to the base of the paper. He should grip the pen or pencil a little further from the point than the right-handed child. His hand should be below his work, rather than beside it, and it is preferable that the slant be to the left or that his writing be almost vertical.

After it is certain a child is left-handed, he should be taught in this way. She should never be made to feel embarrassment and become inferior because of this difference.

According to Ayers,[8] handwriting is judged by five factors:

---

8. L. P. Ayers, Measuring Scale for Handwriting, Russell Sage Foundation, New York City.

(1) uniformity of slant, (2) uniformity of alignment, (3) quality of line, (4) letter formation, and (5) spacing. Several companies publish charts for scoring handwriting. These have samples of writing with a corresponding score. A writing sample is moved along until it is matched as nearly as possible and that is the score given to that writing.

A reasonable amount of speed is desired but legibility should not be sacrificed to obtain it. It is not expected that these children being dealt with in this discussion will make leaders in society or in the business world. If the majority of them can secure a legible script and a fair amount of speed, a reasonably successful achievement will have been made. However, it is sometimes surprising how expert some of these children become at writing for it is a muscular skill. Unless there is a block of some kind, they may learn to write beautifully, as in the case of Sally, an extreme case of mental retardation. She got along well socially with the other children, which was quite remarkable, but she never learned to read. She could learn simple facts of geography, science or any other social subjects and remembered happenings and stories read for many months. Her greatest achievement, however, was writing. She could make very little use of it since she could not spell or write logical sentences, but she would copy anything from the board on paper in a very neat legible script. She seemed to enjoy doing it and would spend several hours each day in writing.

CHAPTER IX

ARITHMETIC

Importance of Arithmetic

Arithmetic holds an important place in the education of the child. It is also one of the most difficult to teach to the mental defective since it requires reasoning and the outstanding characteristic of the mental defective is his inability to reason.[1]

The function of arithmetic is to enable people to handle numbers so that they may do those things which they like to do, and which depend upon a knowledge of numbers for their accomplishment.[2] Charters should have added also what they need to do.

The slow-learner will be able to master all of the processes to some degree. He should be given every chance to get all possible. He should be able to master the fundamental processes: money, time, liquid and linear measures, surface measurements, weight and accounting based upon store bills, wage sheets, and marketing. Simple measurement problems, fractions of one-half, one-third, and one-fourth, simple interest, and household and personal budgeting may be included if they are taken up slowly and much repetition is used in putting them across to the group.

---

1. W. W. Charters, Teaching the Common Branches, p. 273.
2. Ibid., p. 274.

Arithmetic, in the past, has been both over-emphasized and under-emphasized. Skills that were not practicable since they would not be used by possibly more than one or two of an entire class were taught, while other techniques, which would be highly valuable to all members, were omitted.

The tendency now is to teach arithmetic which will be needed in the every day life of the individual, in the home, the market and store, in buying insurance for individuals and home, operating a car, in planning for recreation and vacations, and many other necessary transactions in the elementary and the junior high schools. The more specialized forms of arithmetic and higher mathematics are left for the senior high schools and colleges and this discourse will not be concerned with them.

These common transactions which are necessary in our home and in every day life are the ones which need to be stressed in teaching the mentally exceptional child. If he can be taught enough of them to get along in this competitive world, a good citizen should result in lieu of an individual dependent upon the state or his family for support.[3]

The usefulness of arithmetic will not be a motivating force for these children. It will be necessary to use other means for securing a desire for learning which is often lacking in the slow-learning child.

Under methods of teaching, a number of games and other

---

3. Elsie H. Martins, Teachers Problems with Exceptional Children, III, Mentally Retarded Children, p. 25.

devices will be described for use with this group.

Group competition which is a good motivating force with normal children should not be used with these slow-learners. If they have been placed first with normal children, they have experienced already too much failure. They should not be forced to compete with nor try to excel anyone; they may try to improve their past records as a means of securing a desire to work. Also, when they are given tasks that they can perform, they will have a feeling of accomplishment that will give a further desire to work.

Fundamental Skills

Before considering the skills which are fundamental, it is necessary to know when to begin teaching any of these skills. As in reading and writing, there is a readiness for arithmetic and if we hope to have any success with a child he must be ready to begin. "He must have a general mental development of at least seven years; if his capacity is lower he is not very likely to grasp the explanations given him and will be forced to rely upon sheer memory and verbalism."[4]
With the slow-learner a readiness program quite similar to a reading readiness program may be used. Pictures of objects of which they are to color one, two, three, or more may be used. Many others may be made which will be teaching some simple arithmetic skills.

---

4. Luella Cole, Psychology of the Elementary School Subjects, p. 198.

Counting is one of the first skills to be introduced. By counting the child builds up his number concepts and ascertains the relation between numbers. He should not be taught to count by rote but should count actual objects.[5]

The four fundamental processes are necessary skills. The slow-learners will be able to become reasonably skilled in the simpler combinations of all the processes.

Skill in the use of fractions of one-half, one-third, and one-fourth can be expected of the slow-learner. Skill is also necessary in simple problems that are to be solved. Concrete objects should be used at first so that the child will be able to see what he is doing. Later the slow-learner should be able to get a mental picture of simpler problems The big difficulty in written problems is the inability to read the problem correctly and decide what is to be found and what method is to be used in finding it. These problems must, of course, be very simple in the beginning. If much practice is given and progress is rapid, the slow-learners will be able to solve most problems on the grade school or even junior high school level.[6]

Methods of Instruction for the Slow-Learner

With the slow-learners, one of the first phases of number work should be counting. This counting should never be rote with no objects present, because the students will not

---

5. Ibid., p. 200.

6. Grace M. Fernald, op. cit., p. 152.

be getting any idea of the meaning of the numbers they are saying. Incidental counting is best.[7] Instead of having Johnny count the first row of blocks on the old number frame the teacher may say, "Johnny, how many are present in your row this morning?" Johnny will then see a need for counting. He may also be asked to get enough paper or pencils for his row, which will give him a chance to count.

Many games can be utilized in counting and also in the simple combinations. The games of: Fox and Geese, Jump Rope, Ring Toss, Bean Bags, Bouncing Ball, Red Rover, Table Basket Ball and others were used by the investigator with a group of slow-learning pupils in 1943. Quite satisfactory results were secured.

In the Fox and Geese game, two leaders choose sides. Both sides have a given territory with a dividing line in the center. At a given signal, the geese cross over into the foxes' territory and they try to catch them. After each crossing, the geese check up. They may say, "The foxes got four and we now have only eight," etc. Similar games that may be adapted to use in this way are: Trades or Lemonade; Run Sheep Run; Old Mother Witch; Every Man In His Own Den; Brownies and Fairies, and Midnight. Directions for playing most of these may be found in any good physical education manual.

The number of times each player jumped was counted in Jump Rope. The teacher may also say, "How many more times

---

7. Luella Cole, op. cit., p. 198.

did Mary jump than Johnny?" or similar expressions, making use of combinations as well as counting.

The ring toss game used was the following:

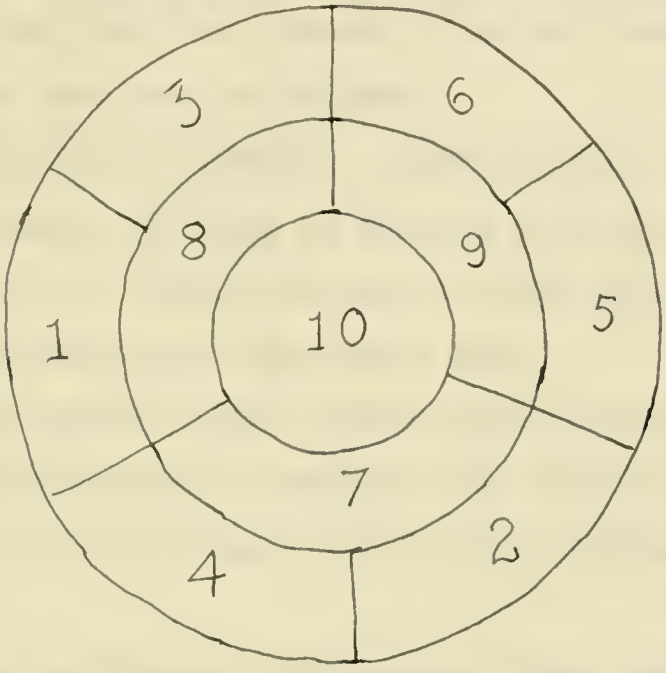


Figure 8. Ring Toss Game

Put the diagram on the board and let the pupils throw some soft object at it. A very soft ball or bean bags are satisfactory. This particular group used erasers which worked satisfactorily. Each child is allowed two throws; his score in the game is the sum of the two numbers he hits. If he hits outside the ring, he must put down zero for that throw. He must add his own score. This works well for first and second grade levels. The numbers may be changed to higher ones and more throws allowed for more difficult drill.

Many other types of diagrams may be used with bean bags with different numbers used for different achievement levels.

Another entirely different Ring Toss game is that made with pegs in a three foot board. These pegs have number values. The child is given two or three small rubber rings (jar rings are good) and throws at the peg board. He adds his score in this game as before.

Bouncing ball is simply a counting game. Each one counts the number of times he bounces the ball without failing to catch it. Comparisons may be made such as, "Ann caught the ball two times more than Sue," etc.

Writing numbers should begin about the same time as counting. Care should be taken to see that the right strokes are used in the beginning so that later difficulties will be avoided.

A large card-board or wall-board clock with movable hands is necessary to teach these children how to tell time. After demonstrating the difference between the long and short hand and how they are used in telling time, the teacher should allow the children to play with it. She will need to supervise and make suggestions such as, "John, we are to have recess at 10:30. Can you make the clock say 10:30? (This clock can easily be constructed by using card-board and paper brads.)

When any child has unusual difficulty in any of the simple combinations, he should have it written on a card so that he can glance at it if he fails to remember it.

Individual combination cards are good for the pupils to use for drill at their seats. These cards may be made by the

children during art period. They may be made either by cutting out figures such as cats or dogs and pasting them on in combination, or they may have the numbers, according to the ability of the pupils. The front has the combination and the back has the answer, as illustrated in Figure 9:

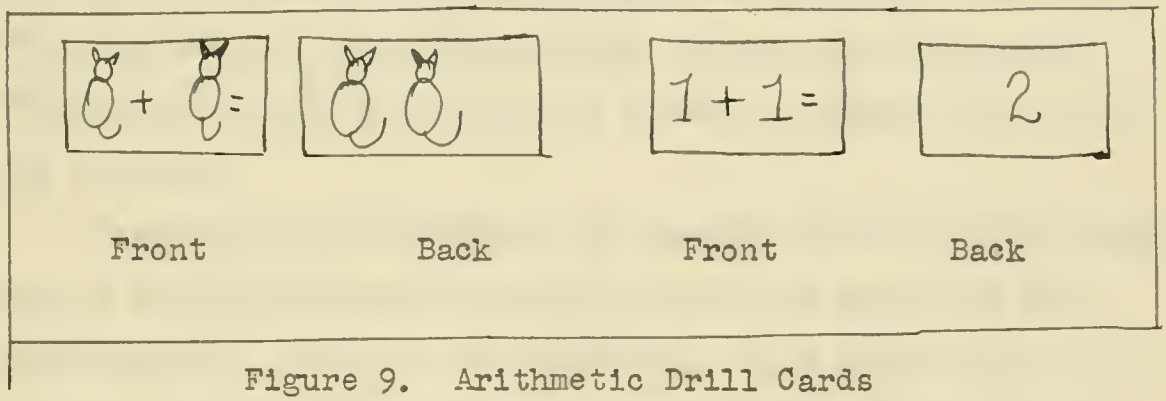


Figure 9. Arithmetic Drill Cards

The child takes his pack of cards with the fronts up. He looks at the combination, says the answer, and turns the card over to check his answer. He puts the ones answered correctly in one stack and those he answers incorrectly in another stack. He tries each day to reduce the stack of incorrect ones.

Another interesting game to help teach the addition combinations is made by using several containers such as different sized bowls or pans one within the other. The child throws soft balls or small bean bags. Each of the bowls or pans has a point value, with the highest score for the small one in the center. After two or three trials, the child adds his score. Wilson[8] suggests the waste paper basket as the target for the largest container.

---

8. G. W. Wilson, et. al., Teaching the New Arithmetic, pp. 83-85.

Playing store is one of the best ways to teach the use of money. No classroom for small children should be without toy money to be used in teaching the use of money in buying and making change.[9]

In teaching fractions, large sheets of paper which can be folded or cut into the required pieces are very useful. This gives the child a visual as well as a mental picture of the process.

Shuffle Board, Dominoes, and keeping score in ball games can be drill experiences for older boys and girls who are slow-learners. Some of the weakest in this group will need objects to picture the problems they are required to solve. One class was given this problem: "How many children are there in five rooms, if there are thirty children in each room?" One boy worked it by using five sheets of paper for rooms and thirty beans on each for the children.[10]

Methods of Instruction for the Mentally Retarded

The mentally retarded child will respond to the same methods used for the slow-learner but at a much slower rate. He will not be able to go as far in any one of the skills as the slow-learner. Much time should be given to teaching him the simple skills he will use in every day life; the most

---

9. Elsie H. Martins, Teachers Problems with Exceptional Children, III, Mentally Retarded Children, p. 25.

10. Arch O. Heck, The Education of Exceptional Children, p. 364.

important of these are: using money in simple transactions, such as buying and making change, telling time, counting and using halves. He will be able to learn simple combinations in addition and subtraction. In fractions, work with halves will probably be all he can master. He should attempt only the very simplest problems, but all the skill possible in problems of every day life should be attained.

CHAPTER X

THE GIFTED

The Challenge of the Gifted

In this democracy of ours, leaders of statesmanship quality are needed but the material from which these leaders should be made is being ignored in part.[1]

A high degree of academic ability is necessary as well as social and physical fitness for the development of these leaders. This academic ability is present in the children enrolled in the public schools who have I. Q.'s of 120 or above, but in most cases no special provisions are being made for them.

The schools are organized to assist the mediocre child in achieving all that he can and in many cases provide for the slow-learners, but the child who is superior academically is still ignored. These children offer a challenge to all educators who recognize the need of society in capitalizing upon this "wealth" available as prospective leaders of the nation.[2]

"What could not be done during the next half century for the betterment of society, if our schools should properly meet this challenge by finding and truly educating one hundred per-

---

1. Elsie H. Martens, Teachers Problems With Exceptional Children, II, Gifted Children, p. 6.

2. Ibid., p. 7.

cent of these youths?"[3]

To meet this challenge and avoid further waste of our greatest human resources--bright and gifted children--better prepared teachers, more abundant and varied materials of instruction, and improved conditions for learning are needed. This challenge of conservation of talent is one of the greatest to educators.

Methods of Providing for the Gifted[4]

Some of the ways of providing for the gifted are: special classes, acceleration or skipping grades, enrichment program, homogeneous grouping in a classroom, variation in assignments, and experimental or experience type units where each child works at his own ability level but contributes to the group project.

In small city or rural areas it would be impossible to find enough pupils for a special class. One of the other methods would have to be used. Probably the best are: the enrichment program and the experience unit. The latter is especially good in small rural communities where one teacher has all or half of the entire school. With this method, the whole class will be working on the same problem but in different groups in the form of committees. The bright children usually make good chairmen of the different

---

3. Arch O. Heck, The Education of Exceptional Children, p. 424.

4. Elsie H. Martens, Curriculum Adjustments for Gifted Children, pp. 8-12.

committees because they are capable of being depended upon and taking on the extra job of organizing and managing them.

Education of the Gifted

Heck[5] gives seven guiding principles of education of the gifted. Summarized, they are:

(1) Equal opportunity, a principle which is violated unless some provision is made for the gifted.

(2) Avoid development of conceit. Gifted children often become conceited if they are kept in the regular class and reference is continually made to their superior ability. They may also become conceited, if placed in a special class unless they are handled carefully.

(3) Social and physical placement. If the child is allowed to take up outside work--course enrichment--and to skip grades to keep him within a group of the same mental ability he is apt to become a social misfit because of his immature social adjustment and his smaller stature.

(4) Worthwhile enrichment. More work of the same kind is not an enriched program. There must be less drill, not more, for these children. They need to be so guided as to investigate for themselves.

(5) Avoidance of bad social habits. If not given enough work to keep him working almost to capacity, the bright child may establish habits of loafing.

(6) All-round development. He needs physical, social and moral growth, as well as academic.

(7) Individual study. The plan of work should be based upon special study of each individual so that his needs will be met.

"Give him room to grow--freedom to develop incentive, to make constructive use of his creative power. Avoid holding

---

5. Arch O. Heck, loc. cit., pp. 390-391.

him down to daily lesson assignments that are planned for the mediocre pupil. Give him a chance to cultivate his talents, and place upon him the charge of making the most of them."[6]

The teacher of a class of gifted children or a class in which there are one or more gifted should, by diagnostic pre-testing, discover what the pupils know before the work in a certain subject is planned. If this is done, needless repetition on skills already mastered will be prevented.

These children do not need the constant supervision and repetition of subject matter which is so necessary in teaching the slow-learners. Often a suggestion is all that is necessary to start them on a problem of their own. Some guidance is needed while a project is being carried out, but it should be limited and not dictatorial.

Martens[7] lists a number of experience units which may be adapted to the "bright" child. They include such titles as, A Course in Problems of Democracy, A Student's Session of Congress, Understanding The Other Citizen's Religion, A Second Grade Takes A Trip to the Orient, A Unit on Norway, A Group Looks Into Its Own Background, An Opportunity Group Studies Astronomy, A Junior High School Group Studies Medicine, Eight-Year-Olds Publish A Magazine, An Intermediate Group Plays Shakespeare, Helping With the Playground Program, and others.

---

6. Elsie H. Martens, Teachers' Problems With Exceptional Children, II, Gifted Children, p. 12.

7. Elsie H. Martens, Curriculum Adjustments for Gifted Children, pp. 37-82.

Martens describes in detail how these units were developed. Very easily they could be made to fit into other programs of work. Of course, no two situations are ever the same and care would necessarily have to be used in permitting the unit to work itself out with each group. No artificial means should be used to make them follow the patterns here, if they did not meet the needs of the group.

Specially Gifted Children

Often there are children with I. Q.'s in the range for normal children, but who are specially gifted. Some have musical, artistic, mechanical, poetic and other inclinations. These special talents should be developed. Up to the present time, these children have received the education provided regularly for all children, plus any additional education provided by their parents.

The special abilities of these children are needed and it is up to the state to set up a program to meet their needs. In many cases, art and music are available in schools, but are not free. The child who has a talent for these has just as much right to training in them as the child who has special talent in mathematics, science, etc. has to training in it.[8]

If the wastefulness of human resources now being practiced is not curtailed, by providing adequate programs for the gifted and specially gifted children, our country cannot hope to compete with other countries that are already providing programs to make leaders of these exceptional children.

---

8. Arch O. Heck, op. cit., p. 435.

CHAPTER XI

CRITERIA FOR EVALUATION

Aims and Objectives of the Program

Before setting up any type of evaluation for a program, it is necessary to set up aims and objectives so that one will know what he is striving for. We must know where we are going in order to know when we get there, if we get there at all. The first step, then, is to learn the I. Q. of each pupil in the class. Since each student is placed in a special class as the result of an I. Q. test, the record of these results should be available readily to the teacher. If for any reason the teacher fails to receive the record, she should give another test.[1] If the group is not one of beginners, achievement tests should also be given to determine the grade levels in the different subjects.

After the teacher has the I. Q.'s and the grade levels in the different subjects of each pupil, she is ready to commence formulation of her objectives. Care should be taken in forming these so that the pupils will not fail to reach them. This is particularly important if the children know what the objectives are, for they are very apt to become discouraged if they fail. It is sometimes a means of motivation for the pupils to try to reach a certain goal if they are allowed to help plan for it.

---

1. Elsie H. Martens, Teachers Problems With Exceptional Children, III: Mentally Retarded Children, p. 20

Objectives for the slow-learners should be immediate or short range. Of course, the teacher will have long range objectives (that the children know nothing about) which she is planning to meet.

"The present happiness of the child is the immediate object. . . but a person who is physically fit, socially and morally minded, industrially capable of even the simplest job, able to give expression to whatever talents he may possess, and withal of a contented spirit is the vision to have for the retarded child grown up."[2]

Some immediate objectives which the children can help formulate might be:

(1) to learn the names of the colors within a definite period,

(2) to learn to count to twenty,

(3) to learn the multiplication tables in a given period of time,

(4) to learn to tell time, and

(5) to read a short story without missing words.

Some long range objectives which the teacher would formulate are:

(1) to teach good social attitudes to the group,

(2) to master the addition combinations in a given period of time, and

(3) to recognize all the words in a particular list.

However, the big objective in the education of handi-

---

2. Ibid., p. 21.

capped children is to make reasonable, happy, self-supporting citizens of pupils who would otherwise be misfits.

Ways of Evaluating the Program

After the teacher knows where her children are, and where they are going, how will she know when they get there? There are a number of ways of testing to find out what has been accomplished, but frequent testing with the low I. Q. groups is discouraged.

With the immediate objectives or goals which the children help to formulate, testing is not necessary. The pupils and the teacher can readily see whether they have reached their goal. Classwork will be the answer.

Coloring a picture, the parts of which are labeled with the colors to be used, would be a test of the first objective listed; however, it would not be called a test, but an art period. Most children become frightened at the word "test" so it is well in many cases to use another term.

In the objective of counting to twenty, the children actually count twenty pencils, twenty marbles or other objects for the other members of the class.

Simple observation of the group will show the teacher if the social objectives have been met. Some achievement tests are necessary to find out how well the pupils are progressing in the academic fields. Probably these should not be given oftener than every three months or twice a year; at the end of each semester is the best plan for this type of testing.

In order to find out if the big objective in educating exceptional children has been met, it would be necessary to have a good follow-up program; a follow-up program which would help secure jobs or positions for these children when they leave school. This is a necessary part of the program for the education of these children. If such a program is in effect, it will be easy to find out if the big objective, that of making self-supporting citizens of these pupils, is being met. In order to do the evaluating effectively, we must have some way of finding what the end product (the adult individual) is.[3]

One of the most important things to remember in an evaluation of the program for slow-learners is that "happiness is the first right of every child, and whatever contributes to the genuine happiness of the retarded pupil contributes to his education. Whatever causes him to become discouraged, discontented, sullen, or rebellious makes for trouble. Thus tasks that are beyond his ability, however worthwhile in themselves, have no place in his educational program."[4]

---

3. Arch O. Heck, The Education of Exceptional Children, p. 374.

4. Elsie H. Martens, Teachers Problems With Exceptional Children, Mentally Retarded Children.

CHAPTER XII

SUMMARY AND RECOMMENDATIONS

It should be remembered that the slow-learner is handicapped only slightly. He is capable of progressing in school at the rate of five-sixths normal speed and all that is necessary are a few special provisions to insure as near normal progress as is possible for him to attain. The thing of most importance in dealing with the slow-learner is the prevention of an inferiority complex. This is best accomplished by finding something he likes to do and can do well and capitalizing on it by giving him a feeling of achievement and encouraging him to make other efforts. In most instances he will respond to the same methods used with normal children but at a slower rate. Patience and understanding are necessary in teaching him. He may require some of the special methods listed below.

For the mentally retarded the picture is not so bright. They are able to acquire academic knowledge up to about fourth grade level. In school the time should be divided equally between academic and vocational work with some provision for music and health education.

Methods for teaching the basic school subjects to the mentally retarded must be simplified. In arithmetic we must use concrete, instead of abstract methods. If he is to count, let him count objects and not by rote. In teaching fractions, let

him cut paper into halves, or thirds, and he will get a better picture.of what they mean. Problem solving will be made simpler if he is given objects to use.

Before teaching reading, much pre-reading instruction is needed and when actual reading has begun, much repetition is needed for complete mastery of words. The experience method is thought by Kirk[1] to be one of the best for this group.

The method to be used in spelling will be determined by the individual pupil. Some will respond to a combination of the oral and written method, while with others it will be necessary to use the hand-kinesthetic or tracing method.

Since writing is primarily a motor skill, the mentally dull child will often write quite well; however, some of them will require special help. The mentally slow child who is left-handed, needs to be given careful attention. He is usually easily upset and according to Baker[2] there is a certain blocking present in most left-handed people. The teacher should not try to change the handedness but should strive to provide for the child so that he will be at as little disadvantage as possible.

No effort should be spared in training these students to be self-supporting and as far as possible happy and socially adjusted citizens. Many of them without careful training would probably join the ranks of the criminal.

---

1. Samuel A. Kirk, Teaching Reading to Slow-Learning Children, pp. 83-92.

2. Harry J. Baker, Introduction to Exceptional Children, p. 197.

The gifted child with an I. Q. of 120 or above is the material from which leaders should be made. If this material is wasted by allowing it to deteriorate because of disuse, where will special leaders of tomorrow be found?

If it is not possible to have special classes for the gifted, they should be given an enriched program within the regular class. This may be in the way of reading for oral or written reports, music in addition to their other subjects, projects for school improvement, publishing the school paper, making a community health survey, putting on an assembly program, and others which will keep them working to their capacity.

Some provision should also be made for the specially gifted. Those who have special ability in music, art, science, mathematics, and other fields should be given an opportunity to fulfill the potentialities of their innate abilities. From this source will come the musical compositions, the masterpieces of art, and the scientific inventions of the future.

The groups of low I. Q.'s offer a great challenge to the educators of our times. Are they going to take up the challenge and make it their responsibility to see that these children are given every opportunity to be transformed from what would have been criminals or near brutes to good citizens, capable of earning a living? Are they going to put forth every effort to get at the causes of these low I. Q. groups

and use preventive measures so that the percentage of the population in these groups will drop? Is the gifted child going to be raised to his rightful place in education?

The writer hopes that they are willing and ready to take up this challenge and to write a new history of the slow-learning child, the mentally retarded child, and the gifted child.

BIBLIOGRAPHY

A. BOOKS

Baker, Harry J., Introduction to Exceptional Children, New York: McGraw-Hill Book Company, Inc., 1940.

Barr, A. S., Burton, W. H., and Brueckner, Leo J., Supervision, New York: D. Appleton and Company, 1947.

Bond, Guy L. and Eva, Teaching the Child to Read, New York: The Macmillan Company, 1944. P. ix + 356.

Broom, M. E., Duncan, Mary Alice Allen, Emig, Dorothy and Stueber, Josephine, Effective Reading Instruction, New York: McGraw-Hill Book Company, Inc., 1942.

Casewell, H. O., and Campbell, Doak S., Curriculum Development, New York: American Book Company, 1935.

Charters, W. W., Teaching the Common Branches, Boston: Houghton Mifflin Company, 1913.

Cole, Luella, Psychology of the Elementary School Subjects New York: Farrior and Rinehart, 1934.

Crow, Lester D., and Alice, Introduction to Education, New York: American Book Company, 1947.

Dewey, John, Human Nature and Conduct, New York: The Modern Library, p. 3.

Fernald, Grace M., Remedial Techniques in Basic School Subjects, New York: McGraw-Hill Book Company, 1943. P. 330.

Gates, Arthur I., A Reading Vocabulary for the Primary Grades, Revised, New York: Teachers College, Columbia University, 1935.

Harris, Albert J., How to Increase Reading Ability, New York: Longman and Green Company, 1946.

Heck, Arch O., The Education of Exceptional Children, New York: McGraw-Hill Book Company, 1940.

Hollingsworth, Leta S., Gifted Children, Their Nature and Nurture, New York: The Macmillan Company, 1927. P. 364.

Jacobson, Paul B., and Reavis, William C., Duties of School Principals, New York: Prentice-Hall, Inc., 1941.

Kirk, Samuel A., and Monroe, Marion, Teaching Reading to Slow-Learning Children, Boston: Houghton Mifflin Company, 1940. P. 187.

Lane, Robert Hill, The Principal in the Modern Elementary School, New York: Houghton Mifflin Company, 1944.

Lane, Robert Hill, The Teacher in the Modern Elementary School, New York: Houghton Mifflin Company, 1941.

Lennes, N. J., The Teaching of Arithmetic, New York: The Macmillan Company, 1924. P. 328.

Maxwell, C. R., and Kilzer, L. R., High School Administration, New York; Doubleday, Doran and Company, Inc., 1936.

Martens, Elsie H., Teachers Problems With Exceptional Children, II: Gifted Children, Washington, D. C.: Office of Education, Government Printing Office, 1934. P. 41.

Martens, Elsie H., Teachers Problems With Exceptional Children, III: Mentally Retarded Children, Washington, D. C.: Office of Education, Government Printing Office, 1934. P. 41.

Martens, Elsie H., Curriculum Adjustments for Gifted Children, Washington, D. C.: Office of Education, Government Printing Office, 1946. P. 82.

McCallister, James M., Remedial and Corrective Instruction in Reading, New York: D. Appleton-Century Company, Inc., 1936.

Meyers, Adolph E., The Development of Education in the Twentieth Century, New York: Prentice-Hall, Incorporated, 1932.

Monroe, Walter S., and Streitz, Ruth, Directing Learning in the Elementary School, New York: Doubleday, Doran and Company, Inc., 1932.

Otto, Henry J., Elementary School Organization and Administration, New York: D. Appleton and Company, 1947.

Rand, Winifred, Sweeny, Mary E., and Vincent, E. Lee, Growth and Development of the Young Child, Philadelphia; W. B. Saunders Company, 1943. P. 443.

Reavis, William C., Pierce, Paul R., and Stullken, Edward H., The Elementary School, Chicago: The University Press, 1938.

Rivlin, Harry N., Educating for Adjustment, New York: D. Appleton-Century Company, 1936.

Smith, Charles M., and Ross, Mary M., A Guide to Guidance, New York: McGraw-Hill Book Company, 1941.

Smith, Nila B., American Reading Instruction, New York: Silver Burdette and Company, 1934.

Schmidt, C. C., Teaching and Learning the Common Branches, New York: D. Appleton-Century Company, 1938.

Stone, Clarence R., Better Primary Reading, St. Louis: Webster Publishing Company, 1936. P. 536.

Torgerson, Theodore L., Studying Children, New York: The Dryden Press, 1947. P. 226.

Washburne, Carleton, Adjusting the Curriculum to the Child, New York: World Book Company, 1932.

Wheat, Harry Grove, The Psychology and Teaching of Arithmetic, Boston: D. C. Heath and Company, 1937.

Whipple, H. D., Making Citizens of the Mentally Limited, Bloomington: Public School Publishing Company, 1927.

Wilson, Guy M., Stone, Mildred B., and Daleymple, Charles O., Teaching the New Arithmetic, New York: McGraw-Hill Company, 1939.

B. PERIODICALS

Lane, Elias N., "Personality for the School Bulletin," The Nation's Schools, (January, 1948)

Witty, Paul, "The Needs of Bright and Gifted Children," National Education Association Journal, (September, 1948)